Project Green Energy Strategy Hackney
Subject Scoping
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Contents

1 Introduction

This document suggests the categories of emissions that should be included in the Hackney Climate Emergency Target. These include emissions from Council Functions such as Council Homes, Council owned buildings, and Emissions sequestered by Council owned Trees. It is the first step in a bold commitment to eliminate emissions that are directly in Hackney Council's control and set the leadership for the residents of the Borough and the World to follow.

2 Executive Summary

Hackney Council recently declared a Climate Emergency,[1] in which they, '*Pledge to do everything within the Council's power to deliver… across the local authority's full range of functions… a 45% reduction in emissions against 2010 levels by 2030 and net zero emissions by 2040…*'

The purpose of this memo is to explore the availability and suitability of data to record progress against this target, and around which to structure clear zero carbon pathways. To test the above emissions selection, Buro Happold have modelled a baseline scenario for Hackney.

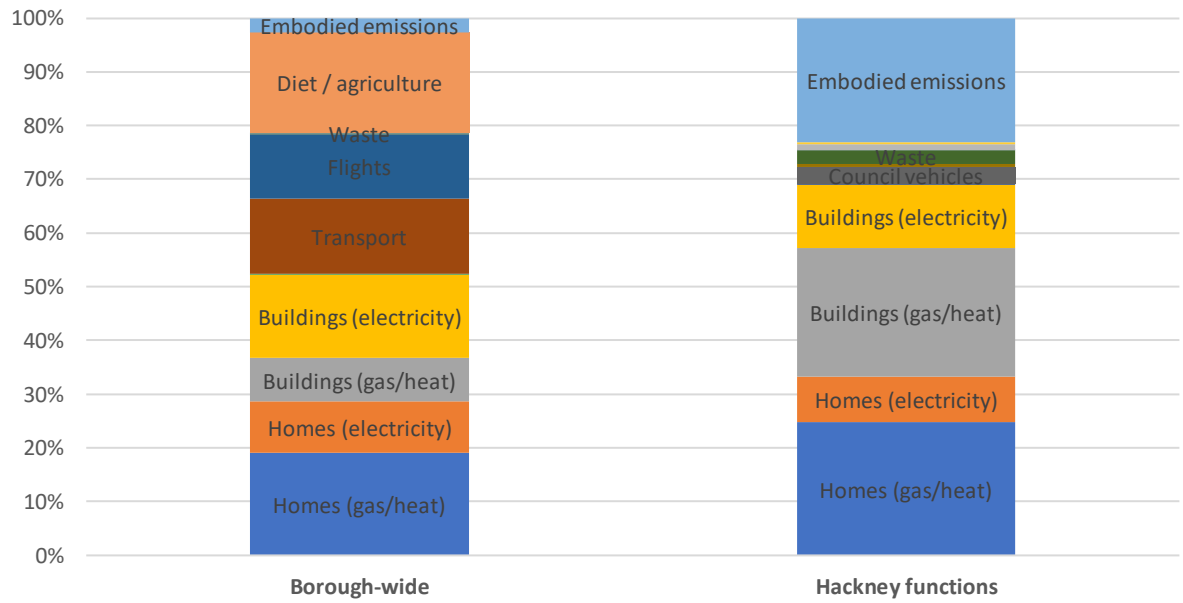

Figure 2—1: Comparison of data for whole borough wide and Hackney functions. This shows what are the main sources of emissions and where there may be data issues.

There are a number of core categories (Table 2—1) with data collected by the Council going back a number of years (although none from before 2010). These are highly relevant and should be included in the Green Energy Strategy.

There are a number of categories that are currently under reported, or difficult to track. These include Embodied emissions of development, diet and procurement of products and services. We recommend that these be included to highlight and track their importance. However, the method of tracking and acquiring data needs to be developed further. Embodied emissions of development is the most developed methodology and has a major impact and we consider that this should be included immediately.

We recommend excluding a number of emissions where their environmental impact can be tracked elsewhere, and their carbon emissions are small. Environmental impacts such as biodiversity, waste, transport and water are important for reasons beyond their carbon emissions. While including these emissions could be considered a holistic and complete approach there is the risk that it will detract from their importance. These environmental impacts are monitored as part of the wider Sustainability Strategy, where they are given suitable importance, therefore the focus of the Green Energy Strategy need not be on these environmental impacts.

[1] http://mginternet.hackney.gov.uk/mgAi.aspx?ID=34291

Table 2—1: Summary of emissions categories.

Core categories with established data	Potential for discussion	Emerging categories	Low emissions and environmental impact tracked elsewhere
Homes (gas/heat)	Homes (electricity)	Embodied energy buildings	Staff commute
Buildings (gas/heat)	Flights	Diet / agriculture	Waste
Buildings (electricity)	Council vehicles	Products and services	Water
Renewable energy		Land use	

3 Scoping methodology

Developing the Hackney Green Energy Strategy requires the definition of key emissions categories for the Borough. These will be used to structure the recommendations, baseline and pathways for this work. Although there will be some Policy recommendations that fall outside the chosen scope, inevitably the strategy will focus on the emissions that are inside the scope.

Selecting the emissions categories depends on the following considerations:

- Alignment with national and international reporting frameworks,
- Availability and quality of data,
- Alignment with climate commitments and targets,
- Power to influence,
- Relevance and size of emissions type,

The following section presents a longlist of energy-related emissions that might be included in the Hackney Council Green Energy Strategy. The above criteria are then explored in more detail, with critical analysis to how it will apply to the Hackney Green Energy Strategy. The longlist of emissions is then analysed against the above criteria. This highlights areas to include and prioritise in this Strategy and informs Buro Happold's recommended scope.

3.1 Longlist of emissions categories

There are a wide range of emissions that may be considered in a green energy strategy. These are summarised in Figure 3—1 for the borough of Hackney and include:

- Power generated and consumed
- Heating and cooling
- Food
- Goods and materials
- Construction
- Aviation
- Waste processes
- Ecology
- Transport
- Industry and Agriculture

As shown in Figure 3—1, this longlist includes both territorial emissions (those associated with processes that occur within Hackney's boundaries) and consumption emissions (emissions generated outside of Hackney's boundaries but in support of activities of the people and activities of Hackney). This document looks at how to select, monitor and account for these emissions. Each will have different levels of priority, data availability and power to influence. For example, staff transport may be easy to influence, but only make up a negligible proportion of the overall emissions quantity. These considerations are explored in the following sections.

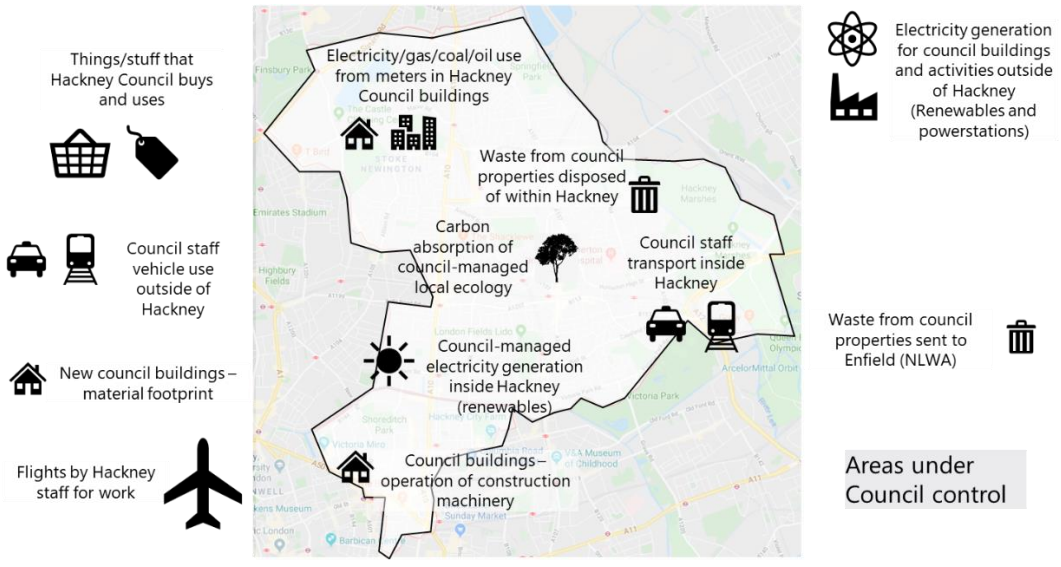

Figure 3—1 Emissions associated directly with council activities. Territorial emissions are marked inside the site boundary, and Consumption-based emissions in the margins.

3.2 Criteria for assessment of emissions categories

Following development of a 'longlist' of emissions relevant to Hackney Council, this section appraises the longlist against a series of criteria. This enables us to identify which emissions to include in the Hackney Green Energy Strategy. The criteria used to assess the emissions cover a wide range of considerations. Table 3—1 summarises the criteria and their

scoring. By categorising the emissions and their relevance to this project we will also highlight where we consider there might be gaps and areas for the council to develop in the future.

Table 3—1: Criteria and analysis for including emissions

Criterion	Alignment with Reporting Frameworks	Emissions category's alignment with criterion	High	Appears in frameworks
			Medium	
			Low	Does not appear in frameworks
Criterion	Data Quality and Monitoring	Emissions category's alignment with criterion	High	Data publicly available
			Medium	Council holds data
			Low	Data needs to be sourced
Criterion	Power to Influence	Emissions category's alignment with criterion	High	Council controls directly
			Medium	Council has some influence
			Low	Council has no influence
Criterion	Alignment with Climate Emergency Statement	Emissions category's alignment with criterion	High	Core aspect of climate emergency statement
			Medium	Refenced in climate emergency statement
			Low	Not in climate emergency statement
Criterion	Size of emissions	Emissions category's alignment with criterion	High	Emissions likely to be substantial
			Medium	Emissions to be considered
			Low	Emissions likely to be negligible
Criterion	Counted elsewhere	Emissions categories also counted elsewhere	High	Environmental impact not tracked elsewhere / carbon emissions are main impact
			Medium	Some tracking elsewhere and carbon emissions reasonably important
			Low	Environmental impact tracked elsewhere / carbon emissions are minor impact

4 Assessment of emissions categories

4.1 Alignment with Reporting Frameworks

Buro Happold has undertaken a critical review of relevant emissions pathway models, carbon accounting methodologies and approaches for categorising different emissions in Zero Carbon strategies at LA, Corporate and National levels. These are reviewed in this section to consider where they might be relevant to this scoping exercise and the selection of emissions categories.

Scoping

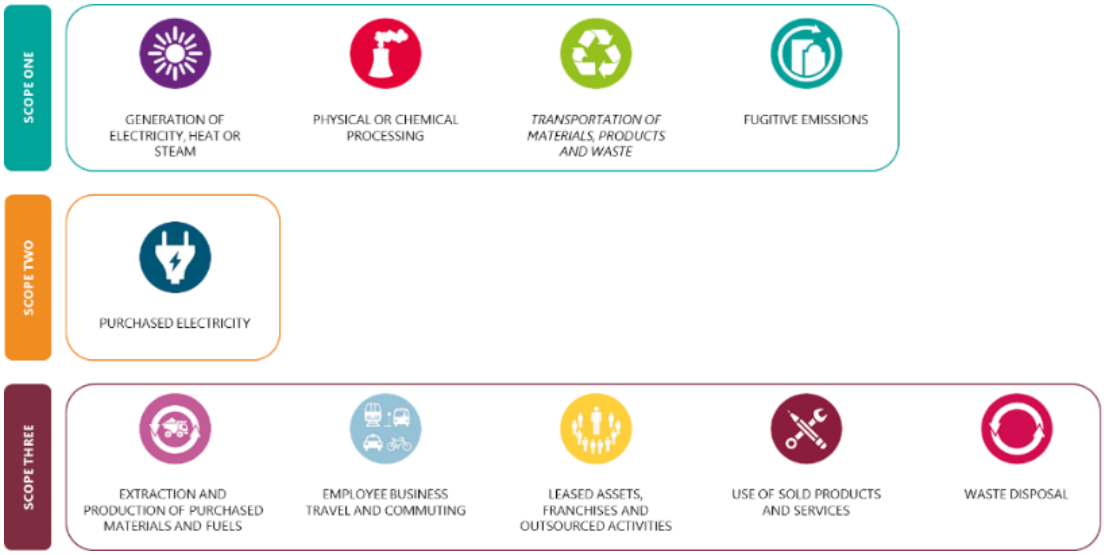

Figure 4—1 Scope 1, 2 and 3 emissions categories. Source: Buro Happold

Emissions are usually categorised according to where they come from, to help prioritise actions and prevent double counting.

The simplest categories are Scope 1, 2 and 3 emissions. These refer to the origin of the emissions: whether they are consumed directly within the geographical boundary of relevance (Scope 1, 2; territorial), or refer to activities which have a carbon footprint that extends across its lifetime and location (Scope 3; consumption). Examples of different scope categorisations are shown in Figure 4—1.

Scopes 1, 2 & 3 are useful categories which prevent double counting. Scope 3 emissions are often excluded to prevent double counting. For this reason it is referenced in most frameworks. However, scope three (consumption) emissions are often discretionary items over which there is most control, therefore they may be considered useful to include.

Accounting

There are several frameworks and evidence bases which outline a selection of emissions to include in accounting. Buro Happold have reviewed the Global Protocol for Community-Scale Greenhouse Gas Emissions Inventories (GPC) accounting framework, the Committee on Climate Change (CCC) UK analysis of UK Emissions and the Greater London Authority (GLA) Zero Carbon Pathways as potential reference frameworks for the Hackney Energy Strategy (Figure 4—2).

	GPC categories	CCC UK categories	GLA Zero Carbon Pathways
TRANSPORT	On-road transportation	Road transport	Cars, LGVs, HGVs, Buses, Taxis, Motorcycles
	Railways		Rail, London Underground
	Waterborne navigation	Shipping	River
	Aviation	Aviation	Aviation
	Off-road		Non Road Mobile Machinery
RESIDENTIAL/ DOMESTIC	Residential buildings	Electricity/ Hydrogen	Gas boiler, Electric Heating, Heat Pump, Hybrid Heat Pump, District Heating, Hydrogen, Grid Electricity
NON-DOMESTIC /INDUSTRIAL/ COMMERCIAL	Commercial/institutional buildings and facilities	Electricity/ Hydrogen	Gas boiler, Electric/District Heating, Heat/Hybrid Heat Pump, Hydrogen, Grid Electricity
	Manufacturing industries and construction, Industrial Processes	Industry	Industry
	Energy Industries		
	Fugitive Emissions from oil, coal and natural gas systems		
	Solid and wastewater treatment and disposal	Waste	Landfill
AGRICULTURE AND LAND	Agriculture, forestry and fishing activities	Agriculture	
	Land	Land use	
OTHER	Non-specified sources		
	Product Use	Buildings, Infrastructure	
		F Gases	

Figure 4—2 Categories of emissions across typical reporting frameworks

As Figure 4—2 shows, the treatment of different emissions categories is similar across all three approaches, covering diverse Scope 1,2 and 3 emissions for domestic, non-domestic and other situations.

The GPC[2] framework is the most comprehensive of the three, and sets out a structured approach for monitoring and reporting emissions. While this is a useful reference point, this approach is intensive, requires monitoring and data that is unlikely to be available, and in some places reports vaguely on datasets that Hackney Council will want to look into in more detail. For example, transport types in Hackney are more varied than the GPC categories suggest and therefore a more detailed approach may be suitable (as seen in the GLA).

The CCC UK and GLA Zero Carbon Pathways present detailed methodologies for calculating emissions reductions. This provides useful reference points and detail on data sources and treatment. However, both could be more comprehensive, the CCC data does not Local Authority level targets or frameworks, while the GLA pathways omit Scope 3 emissions. Emissions used in these approaches are likely to have good data availability, be useful for comparison with other net zero pathway initiatives and be of public interest.

As with categorisation by Scope, there is no framework which is perfectly aligned with the needs of Hackney. However, it is recommended that all emissions categories should be selected from one of these frameworks, and guidance on accounting and reporting followed where useful.

4.2 Quality of available data and ease of monitoring

Emissions in the Green Energy Strategy can only be included with sufficient quality of available data. This means data which is consistently collected and reported, freely available to or collected by Hackney Council, and which covers all emissions within the category.

For Hackney, relevant datasets may include:

- BEIS emissions data – borough-wide emissions data on Scope 1 and 2 emissions from 2005 onwards
- GLA datastore council data
- Council-held data on asset inventory, fuel consumption, land-use etc
- Census data, surveys and studies on population behaviour and local trends
- Planning data
- Industry data and monitoring

[2] https://ghgprotocol.org/greenhouse-gas-protocol-accounting-reporting-standard-cities

4.3 Power to Influence

Some emissions discussed so far, may not be appropriate for inclusion if the council has little control to affect them. For example, reductions in heating demand in privately owned homes has proven repeatedly difficult to reduce. It may be better to focus efforts where there is greatest power to change.

4.4 Alignment with Climate Emergency Statement

It is essential that selected emissions categories are used to direct a Hackney Energy Strategy that aligns with Hackney Council Climate strategies and commitments, namely achieving net zero emissions across council functions by 2040.[3] Table 4—1 sets out key areas in Hackney Council statements. Where appropriate, all emissions underpinning these commitments must be included in the final scope of this Strategy. Several of these emissions are subject to data availability and overall scoping decisions.

Table 4—1 key climate emergency commitments made by Hackney Council.[4]

Hackney Council commitment	Notes on modelling capability
45% reduction in emissions against 2010 levels by 2030, net zero by 2040.	Must be met in the Hackney Green Energy Strategy.
Obtain 50% of its electricity from renewable sources by April 2019 as part of its route towards 100% renewable electricity this term.	Energy consumption data is a key emission. Model should include renewable generation and grid decarbonisation factors.
Hackney Council committed to cover the Council's own roof space with solar panels.	
Establish a publicly-owned energy company to extend 100% renewable electricity to households and invest in clean electricity generation.	
Implement the world-leading ISO 50001 energy efficiency management system to reduce consumption of gas and electricity by improving energy efficiency in buildings and street lighting.	Potential to include. Indirect capture through energy efficiency measures reducing direct consumption.
Produce a housing asset management strategy that commits to ensuring the borough does not let properties lower than EPC band C beyond 2030.	May be included given sufficient data for analysis.
Radically reducing its consumption of the petro-chemical plastics through the latest edition of the Sustainable Procurement Strategy.	Not in scope.
Reduce private vehicle use.	Potential to include depending on final scoping decisions.
Develop low carbon planning policy.	Potential to include if planning policy includes quantitative metrics that can be modelled e.g. $\%m^2$ under retrofit.
Decarbonise the Council's fleet of vehicles.	Should be included in model if possible.

4.5 Size of emissions

Some emissions may be negligible in the context of an energy portfolio, and as such not be necessary to include in the model. Examples of this might include tree sequestration data for council-maintained inventories, which may be limited in urban environments compared to very high levels of residential energy consumption. Conversely, some emissions that are often excluded such as consumption based emissions, could be considered too large to entirely ignore.

[3] http://mginternet.hackney.gov.uk/mgAi.aspx?ID=34291

[4] https://hackney.gov.uk/hlp-green-homes and http://mginternet.hackney.gov.uk/mgAi.aspx?ID=34291

This criterion may be reconsidered following an initial baseline analysis of Hackney emissions data, where the relative magnitudes of different emissions will be more apparent.

4.6 Summary of assessment

Table 4—2 summarises the score of each emission category against the criteria. More detailed notes are available in the Appendix 1 version.

Table 4—2 Review of emissions associated with Council assets and actions.

Emissions type	Reporting Frameworks	Data Quality	Power to Influence	Climate Emergency	Size of emissions	Tracked elsewhere	Include	Comment
Homes (gas/heat)	High	High	High	High	High	High	Include	Core emission category.
Homes (electricity)	High	Medium	Low	High	High	High	TBC	Individual meter data may be hard to acquire (GDPR) and difficult to control.
Buildings (gas/heat)	High	High	High	High	High	High	Include	Core emission category.
Buildings (electricity)	High	High	Medium	High	High	High	Include	Core emission category.
Renewable energy	High	High	High	High	Low	High	Include	Core emission category.
Council vehicles	High	High	High	High	Low	Medium	Exclude	Very small and currently undergoing switch to electric vehicles.
Staff commute	Medium	High	Medium	Medium	Low	Medium	Exclude	Low emissions and impact tracked elsewhere.
Flights	Low	Low	Low	High	Low	High	Include	Low emissions but highly sensitive
Waste	High	Medium	Medium	Medium	Low	Low	Exclude	Low emissions and environmental impact tracked elsewhere.
Water	Medium	Low	Medium	Low	Low	Low	Exclude	
Food consumption	Low	Low	High	Medium	High	Medium	In future	High control poor current data
Products and services	Low	Low	High	Medium	Medium	Medium	In future	
Land use	Medium	Medium	High	Medium	Low	Low	Exclude	Low emissions and impact tracked elsewhere.
Embodied energy buildings	Medium	Low	Medium	Medium	High	High	TBC	High emissions that are not tracked elsewhere. Could be controlled through planning.

5 Exploration of chosen categories

5.1 Review of baseline emissions

To test the above emissions selection, Buro Happold have modelled a baseline scenario for Hackney. This includes a model of Hackney Council Asset consumption, borough-wide emissions data for 2018, and a preliminary assessment of the embodied energy of buildings and council vehicles.

Table 5—1 shows the Hackney Council emissions baseline. This indicates that emissions from building operation and construction make up the biggest contribution to the carbon footprint. However, it appears that Energy from Council Homes is under reported. Waste and water supply and treatment make up a negligible proportion of the emissions inventory, and as such could be excluded from future modelling.

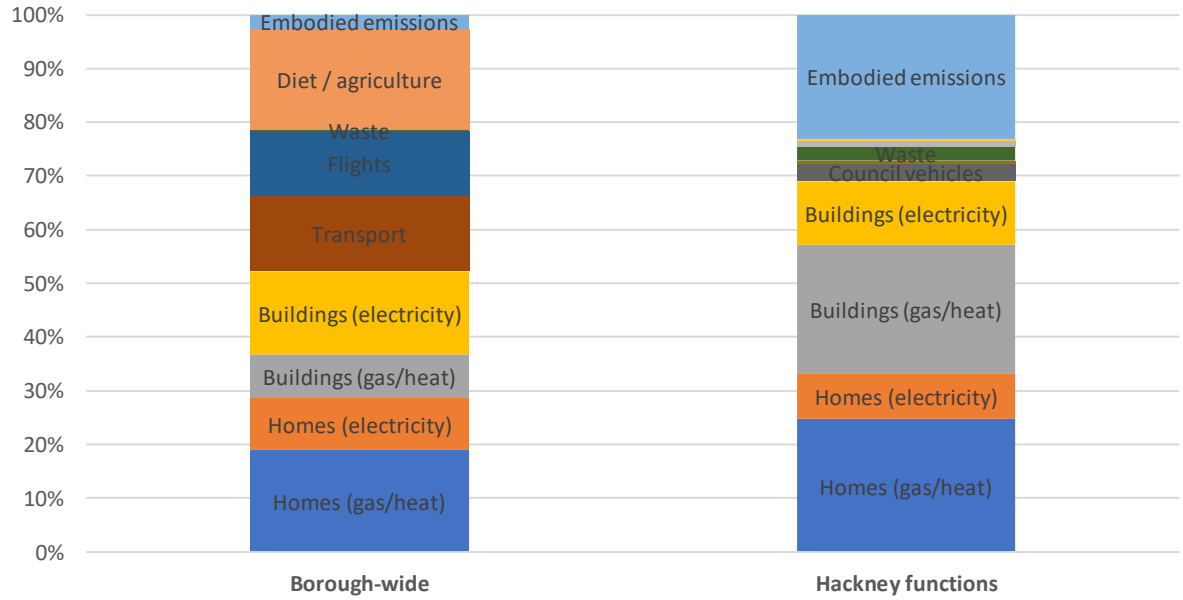

Figure 5—1: Comparison of data for whole borough wide and Hackney functions. This shows what are the main sources of emissions and where there may be data issues.

The Council data set shows some parallels with the borough-wide emissions, with gas and electricity use making up the majority of emissions. Transport makes up a larger proportion of borough emissions than for the Council inventory, since the latter only covers staff commuting and the council vehicle fleet (assumed ~200 vehicles).

Finally, Table 5—1 summarises the data. The data comes from a number of different sources and some auditing and checking is still required.

Table 5—1: Summary of Borough wide and Council Function emissions. Includes key assumptions in data.

	Boroughwide (ktCO2e)	Council functions (ktCO2e)	Comment
Homes (gas/heat)	188	8	LA housing contribution should be approximately a third of borough total
Homes (electricity)	95	3	LA housing contribution should be approximately a third of borough total
Buildings (gas/heat)	78	8	Very high proportion of Gas and much smaller proportion of electricity. Would be good to compare floor area of Hackney Council Assets to ensure data quality.
Buildings (electricity)	153	4	
Renewable energy		0.0435	
Transport	138		
Council vehicles		1	Based on 1000 vehicles, travelling 400km/wk.
Staff commute		0.22	Based on staff travel survey
Flights	119		Pro rated against UK consumption
Waste	3	0.84	Based on number of households and Borough waste statistics
Water	0.04	0.02	Based on number of households and average water consumption
Diet / agriculture	184		Pro rates against UK consumption
Products and services		0.3	Based on 1,000 vehicles, life of 10yrs.
Land use		0.1	Based on ~10,000 street trees
Embodied emissions	27.3	7.6	Based on number of households and Hackney Buildings floor areas. Building life assumed 60 and 120 yrs.

5.2 SWOT Analysis

The recommended emissions scope has been reviewed using a SWOT analysis (table *). This indicates that the recommended scope has strengths around its alignment with the climate emergency statement, its use of detailed Hackney Council data on both emissions and generation, and inclusion of Scope 3 emissions.

Conversely, threats appear from the recommended scope's reliance on datasets which may change in format over time, making updates or monitoring of the model more challenging. There is also the possibility that some assets may not be represented in the data.

Finally, there are considerations to be made around communicating the project. While co-benefits of the strategies implemented in light of the project – such as wellbeing, improved air pollution, lower bills – may be used to communicate its strengths to stakeholders, it will also be important to be clear that the pathways refer solely to council assets, and not all emissions associated with Hackney Borough.

	Strengths	**Opportunities**
Weaknesses	Key emissions sources are captured. A wide range of emissions types are included, with strong alignment with the Hackney Council Climate Emergency Statement. This is an opportunity for Hackney Council to show world class, progressive leadership on this issue. Inclusion of sequestration and PV will help the achievement of Net Zero, and encourage expansion and protection of this infrastructure.	Many positive climate-related factors like biodiversity and air pollution improvements are not included in energy analysis. Communication of this Strategy should focus on these co-benefits. Inclusion of PV and carbon sequestration from trees will help drive and guide Hackney Council commitments in these areas. These are also positive, popular solutions, which will see good community response and have broad economic, biodiversity and health co-benefits. Flexibility in reporting emissions through bespoke categories gives scope to analyse emissions by categories that will be used to drive policy and within council management – for example, documenting residential and non-residential energy consumption measures. This will result in clear reporting, and highlight targeted areas for action when designing pathways.
Threats	Inclusion of Scope 3 emissions such as those associated with goods and services is a strength, but data may harder to source accurately, and may result in the achievement of Net Zero being more challenging. Relies on council data, which is at-source and consistent with other reporting. However, use of model into the future relies on consistent monitoring, and other data sources may be hard to compare or align with council data – resulting in double counting or gaps.	It is possible that at only considering Hackney Assets will be criticised. If this work is presented as a Hackney Council Net Zero Strategy, it may be argued that Net Zero pathways should include a broader scope of constituent activities, which are under council influence. Some emissions may have been overlooked – for example any out of boundary council properties not monitored in council datasets. Similarly, some excluded emissions may be larger than anticipated – e.g. electricity generation out of borough. This threatens the accuracy of the dataset.

5.3 Alignment with GLA Zero Carbon pathway tool

We have compared the GLA Zero Carbon Pathway tool with the work we have planned for the Hackney Green Energy Strategy (Table 5—2), this shows there is a high degree of alignment between the two approaches.

Table 5—2 Comparison of GLA tool and Hackney Green Energy tool

	GLA Pathway tool	Hackney green energy tool
First year of data	2015	April 2016
Sectors / categories	Transport / Homes / Workplaces/Industry Heating / Electricity / Cooling	Homes / Workplaces Heating / Electricity Embodied carbon
Fuels	Gas Electricity Hydrogen Solar PV Petrol Diesel	Gas Electricity Currently included as a more efficient gas network, not output energy use measure Solar PV included as an offset NA – no transport in model NA – no transport in model
Technologies considered for decarbonisation strategy	Energy efficiency District heating Heat pumps Solar (PV and hot water) Hydrogen Electric heating and grid Smart homes EV Charging Hydrogen refuelling	Energy efficiency District heating Heat pumps Solar (PV and hot water) Hydrogen Electric heating and grid Smart homes NA – no transport in model NA – no transport in model
Outcomes analysed	Carbon emissions Capital costs Operation costs Peak electricity demand Carbon budgets	Carbon emissions Capital costs Operation costs Peak electricity demand Science based targets
Policy levers analysed	RE:NEW MEES Extended energy leap Building regs and planning Council tax linked to EPCs Stamp duty linked to EPCs RE:FIT Business rates linked to EPCs Lighting efficiency Smart controls measures Appliance efficiency	RE:NEW MEES Extended energy leap Building regs and planning NA to rented accommodation NA to rented accommodation RE:FIT Business rates linked to EPCs Lighting efficiency Smart controls measures Appliance efficiency
Origin of data	Leggi emissions	Meter readings / billing information
Extent of emissions	Whole borough	Energy consumption managed by Hackney Council

5.4 Alignment with ISO50001

The baseline that is chosen needs to support the ISO50001 process that the Council is currently considering. Some emissions categories that are included in the Green Energy may not fall under the ISO50001 and vice versa. It is important that where there is overlap, the data used is consistent. For example, the process for measuring electricity consumption in Council buildings should be the same for both ISO50001 and the Green Energy Strategy. We have assumed that the Green Energy Strategy will define broadly what will be measured whereas the ISO50001 will develop more detail about how it will be measured.

ISO50001 requires that energy measurement, policy and targets align. We will follow the same strategy here.

6 Conclusion

This scoping note considers the emissions categories to include in the Hackney Council Energy Strategy. No single monitoring or reporting framework is suggested, since none contain all emissions on which the Council may wish to focus, and similarly many framework categories consider emissions Hackney Council will not be able to capture.

Buro Happold recommends that the scope of the project focusses on modelling, monitoring and analysing a range of Scope 1, 2 and 3 emissions categories for Hackney Council assets. These have been selected based on criteria such as power to influence, magnitude, inclusion in reporting frameworks and data availability. A preliminary baseline of Hackney Council's emissions confirmed that the above emissions make up a sizeable portion of the overall inventory and have the necessary data associated to include in reporting.

Table 6—1: Summary of emissions categories.

Core categories with established data	Potential for discussion	Emerging categories	Low emissions and environmental impact tracked elsewhere
Homes (gas/heat)	Homes (electricity)	Embodied energy buildings	Staff commute
Buildings (gas/heat)	Flights	Diet / agriculture	Waste
Buildings (electricity)	Council vehicles	Products and services	Water
Renewable energy		Land use	

There are a number of core categories with data collected by the Council going back a number of years (although not as far back as 2010). These are highly relevant and should definitely be included in the Green Energy Strategy.

Conversely there are several categories that are currently under reported, or difficult to track. These include Embodied emissions of development, diet and procurement of products and services. We recommend that these be included to highlight and track their importance. However, the method of tracking and acquiring data needs to be developed further. Embodied emissions of development is the most developed methodology and has a major impact and we consider that this should be included immediately.

We recommend excluding a number of emissions where their environmental impact can be tracked elsewhere and their carbon emissions are small. Environmental impacts such as biodiversity, waste, transport and water are important for reasons beyond their carbon emissions. While including their emissions could be considered a holistic and complete approach there is the risk that it will detract from their importance. We would recommend that a suite of environmental impacts are monitored as part of a wider Sustainability Strategy but that the focus of the Green Energy Strategy not be on those emissions.

7 Appendix A – emissions type notes

Table 7—1: Detailed notes on emissions.

Emissions type	Alignment with Reporting Frameworks Data	Data Quality and Monitoring	Power to Influence	Alignment with 5 Emergency Statement	Size of emissions
Homes (gas/heat)	Yes, domestic consumption is included in all frameworks	Collected by Hackney Council since 2016.	Direct council influence on choice of grid, plant, retrofits etc	Full alignment, major part of energy footprint	Large
Homes (electricity)		Personal data may fall under GDPR	Can encourage tenants to use less		large
Buildings (gas/heat)	Yes, non -domestic consumption is included in all frameworks	Collected by Hackney Council since 2016	Direct council influence on choice of grid, plant, retrofits etc		large
Buildings (electricity)					
Renewable energy	Yes, included in all frameworks	Collected by Hackney Council	Direct council influence	Yes, council has energy generation commitments	Small
Council vehicles	Yes, transport is included in all frameworks	Some borough-level data available	Direct council influence	Indirect relevance	Likely to have some impact
Staff commute	Scope 3	Good: staff transport survey	Can facilitate active choices	No specific commitment on staff travel	Small
Flights	Scope 3, not included in all frameworks	Data will have to rely on typical population metrics	Strong council influence on business travel	Indirect relevance	Council impact small but resident's impact large
Waste	Yes, included in all frameworks	If numbers available from council	Some council influence on management strategy	Indirect relevance	Likely to be small
Water	Not included in frameworks	Data may be hard to source	Some council influence	Low	Small
Diet / agriculture	Scope 3, not included in all frameworks	Data on emissions of food hard to source. Data on food consumed not currently collected.	Minimal council influence, particularly outside of council procurement	Indirect relevance	May be large and increasingly important in future.
Products and services	Scope 3, not included in all frameworks	Data may be hard to source, council may have some inventory data	Direct council influence on procurement strategy	Indirect relevance	Likely to have some impact
Land use	Sometimes included in frameworks and analysis, but usually at hectare scale	Some borough-level data available	Direct council influence	Yes, council has tree planting commitments	Likely to be small
Embodied emissions	Included in some frameworks, little clear guidance outside of construction industry	LCA on new builds are increasingly carried out.	Direct council influence.	Indirect relevance	Has a large impact and is very important for new development.